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Claims

[c1] 1. A pipe connection for a heat exchanger (1) in which the heat exchanger comprises a number of corrugated plates, where each plate has a first edge part opposite a second edge part and a third edge part opposite a fourth edge part, between which corrugated plates there are provided first and second flow channels, where a heat emitting medium (6) flows through every alternate channel and a heat absorbing medium (7) flows through every other alternate channel, and where a collecting channel (8) with a diverging cross-section for said heat emitting medium (6) is placed at one side of the heat exchanger and connected to an inlet section a combined inlet and outlet pipe joint (2, 3) for said heat emitting and heat absorbing media, and an outgoing collection channel (4) for said heat absorbing medium (7) arranged on the same side of the heat exchanger and connected to an outlet section of said inlet and outlet pipe joint (2, 3), the inlet pipe joint (2) comprising a deformable first pipe section (10), arranged to absorb thermal and mechanical loading in both axial and radial directions, and at least one further, second pipe section (2a, 2b).

[c2] 2. The pipe connection for a heat exchanger as recited in claim 1, wherein the deformable first pipe section (10) further comprises a substantially cylindrical pipe having a corrugated cross-section in the axial direction of the pipe.

[c3] 3. The pipe connection for a heat exchanger as recited in claim 2, wherein the deformable first pipe section (10) has an inner diameter (D_1) corresponding to the smallest diameter of the corrugated section, equal to the inner diameter (D_2) of the adjoining second section (2).

[c4] 4. The pipe connection for a heat exchanger as recited in claim 1, wherein the deformable first pipe section (10) has a material thickness that is less than the thickness of the second pipe section.

[c5] 5. The pipe connection for a heat exchanger as recited in claim 1, wherein the second pipe section (2) has a cylindrical basic shape.

[c6] 6. The pipe connection for a heat exchanger as recited in claim 5, wherein the deformable first pipe section (10) is attached to the cylindrical pipe section (2) upstream in the direction of flow.

[c7] 7. The pipe connection for a heat exchanger as recited in claim 5, wherein the deformable first pipe section (10) is

attached to the cylindrical pipe section (2) downstream in the direction of flow.

[c8] 8. The pipe connection for a heat exchanger as recited in claim 5, wherein the deformable first pipe section (10) is attached between the second, cylindrical pipe section (2a) and a third, cylindrical pipe section (2b).

[c9] 9. The pipe connection for a heat exchanger as recited in claim 1, wherein the second pipe section (2) has a conical basic shape.

[c10] 10. The pipe connection for a heat exchanger as recited in claim 9, wherein the deformable first pipe section (10) is attached to the conical pipe section (2) upstream in the direction of flow.

[c11] 11. The pipe connection for a heat exchanger as recited in claim 9, wherein the deformable first pipe section (10) is attached to the conical pipe section (2) downstream in the direction of flow.

[c12] 12. The pipe connection for a heat exchanger as recited in claim 1, wherein a combination of the inlet and outlet pipe joint comprises two substantially concentric pipes (2, 3).

[c13] 13. The pipe connection for a heat exchanger as recited

in claim 12, wherein the deformable first pipe section (10) has an inner diameter (D_1) corresponding to the smallest diameter of the corrugated section, equal to the inner diameter (D_2) of the adjoining second section (2).

[c14] 14. The pipe connection for a heat exchanger as recited in claim 12, wherein the outer pipe joint (3) has a conical basic shape.

[c15] 15. The pipe connection for a heat exchanger as recited in claim 1, wherein the inlet pipe joint is welded to the incoming collection channel (8).

[c16] 16. The pipe connection for a heat exchanger as recited in claim 1, wherein the deformable section (10) is welded to the incoming collection channel (8).

[c17] 17. A pipe connection for a heat exchanger (1) comprising:
two substantially concentrically oriented conduits (2, 12) defining two flow channels, one of said flow channels configured as an annulus about the other;
at least one of said conduits (2, 12) comprising a deformable section (1) for absorbing thermal and mechanical loading in both axial and radial directions when installed on an heat exchanger operating in start-up mode.

[c18] 18. The pipe connection for a heat exchanger as recited in claim 17, wherein the deformable section (10) is configured as bellows corrugations.